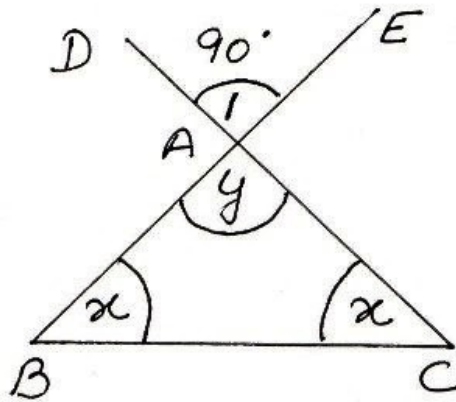


2 (v)



$$\angle BAC = \angle 1 \quad (\text{vertically opp. } \angle s)$$

$$y = 90^\circ$$

In  $\triangle ABC$

$$\angle BAC + \angle B + \angle C = 180^\circ$$

(angle sum prop. of  $\triangle$ )

$$y + x + x = 180^\circ$$

$$90 + 2x = 180$$

$$\Rightarrow 2x = 180 - 90$$

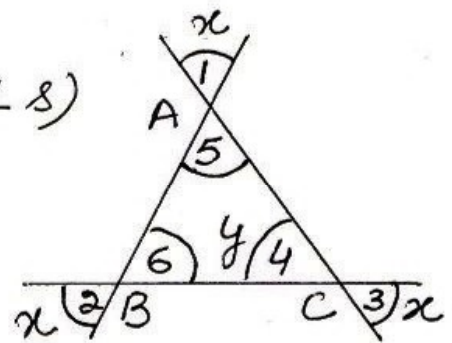
$$\Rightarrow x = \frac{90}{2} = 45^\circ$$

2 (vi)  $\angle 4 = \angle 3$  (vertically opp  $\angle s$ )

$$x = y$$

$$\angle 5 = \angle 1 = x \quad (\text{do})$$

$$\angle 6 = \angle 2 = x \quad (\text{do})$$



In  $\triangle ABC$

$$\angle 5 + \angle 6 + \angle 4 = 180^\circ \quad (\text{angle sum prop of } \triangle)$$

$$x + x + x = 180^\circ$$

$$\Rightarrow 3x = 180$$

$$\Rightarrow x = \frac{180}{3} = 60^\circ$$